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Description:	This section discusses the use and storage of hazardous materials associated with the construction and operation of the Darden Clean Energy Project and the potential effects on human health and the environment.
Filer:	Megan Knight
Organization:	Rincon Consultants, Inc.
Submitter Role:	Applicant Consultant
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5.9 Hazardous Materials Handling

This section discusses the use and storage of hazardous materials associated with the construction and operation of the Darden Clean Energy Project (Project) and the potential effects on human health and the environment. Section 5.9.1 describes the environmental setting. Section 5.9.2 describes the regulatory setting. Section 5.9.3 identifies the potential impacts to the environment and human health during construction and operational activities. Section 5.9.4 discusses the potential cumulative impacts to the environment. Section 5.9.5 presents applicable laws, ordinances, regulations, and standards (LORS) for hazardous material handling and storage during Project construction and operations. Section 5.9.6 identifies agencies involved and provides agency contact information. Section 5.9.7 describes applicable permits for hazardous materials handling and storage during Project construction and operations. Section 5.9.8 provides all references used to develop the hazardous materials handling section.

5.9.1 Environmental Setting

The Project site is located in an agricultural area of unincorporated Fresno County south of the community of Cantua Creek. This subsection summarizes the potential effects on human health and the environment from the use and storage of hazardous materials in relation to the construction and operations of the Project.

5.9.1.1 Land Use and Sensitive Receptors

Land use in the immediate vicinity of the Project site (discussed in detail in Section 5.2, *Land Use*) is primarily undeveloped current or former agricultural land with some residential properties. Within a 6-mile radius of the Project site, there are several businesses and residences. Single family residents along South Sonoma Avenue, South Napa Avenue, and West Stroud Avenue are located adjacent to the Project site. Single family residents along West Mt Whitney Avenue and West Cerini Avenue are also located near the Project site. No residences are located in proximity to the utility switchyard or alternate green hydrogen facility.

The nearest schools to the Project site are the Westside Elementary School approximately 2 miles south of Mt. Whitney Avenue, Cantua Elementary School approximately 3.3 miles northwest of the Project site on West Clarkson Avenue, and the Helm Elementary School located 3.6 miles northeast of the Project site at the intersection of West Kamm Avenue and State Route (SR) 145. Figure 5.9-1a through Figure 5.9-1e shows the locations of sensitive receptors as identified by the California Energy Commission Appendix B, including schools, hospitals, day-care facilities, and long-term health facilities, within a 6-mile radius of the Project.

Figure 5.9-1a Sensitive Receptors Within 6 Miles of the Project - Overview

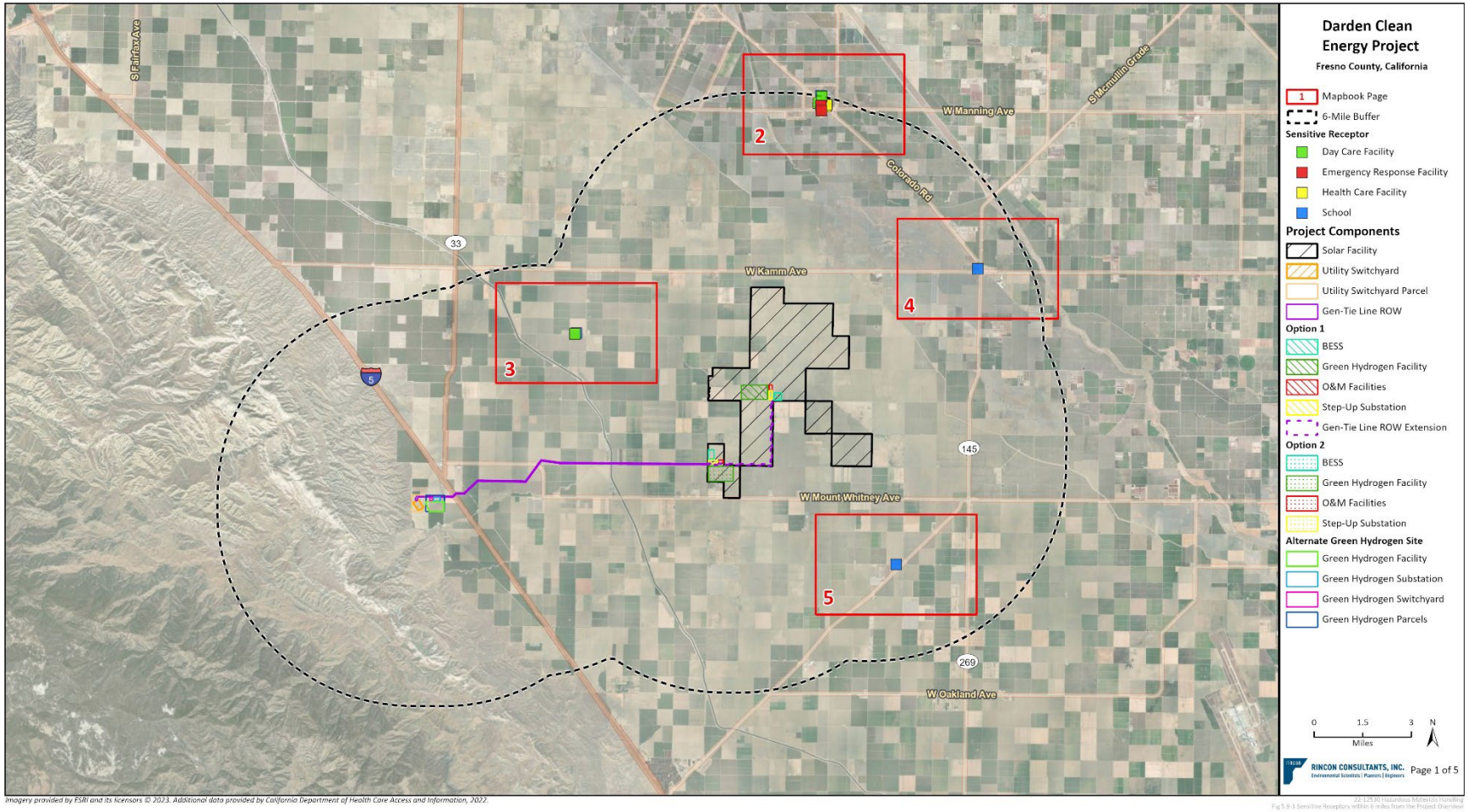


Figure 5.9-1b Sensitive Receptors Within 6 Miles of the Project (Mapbook Page 2)

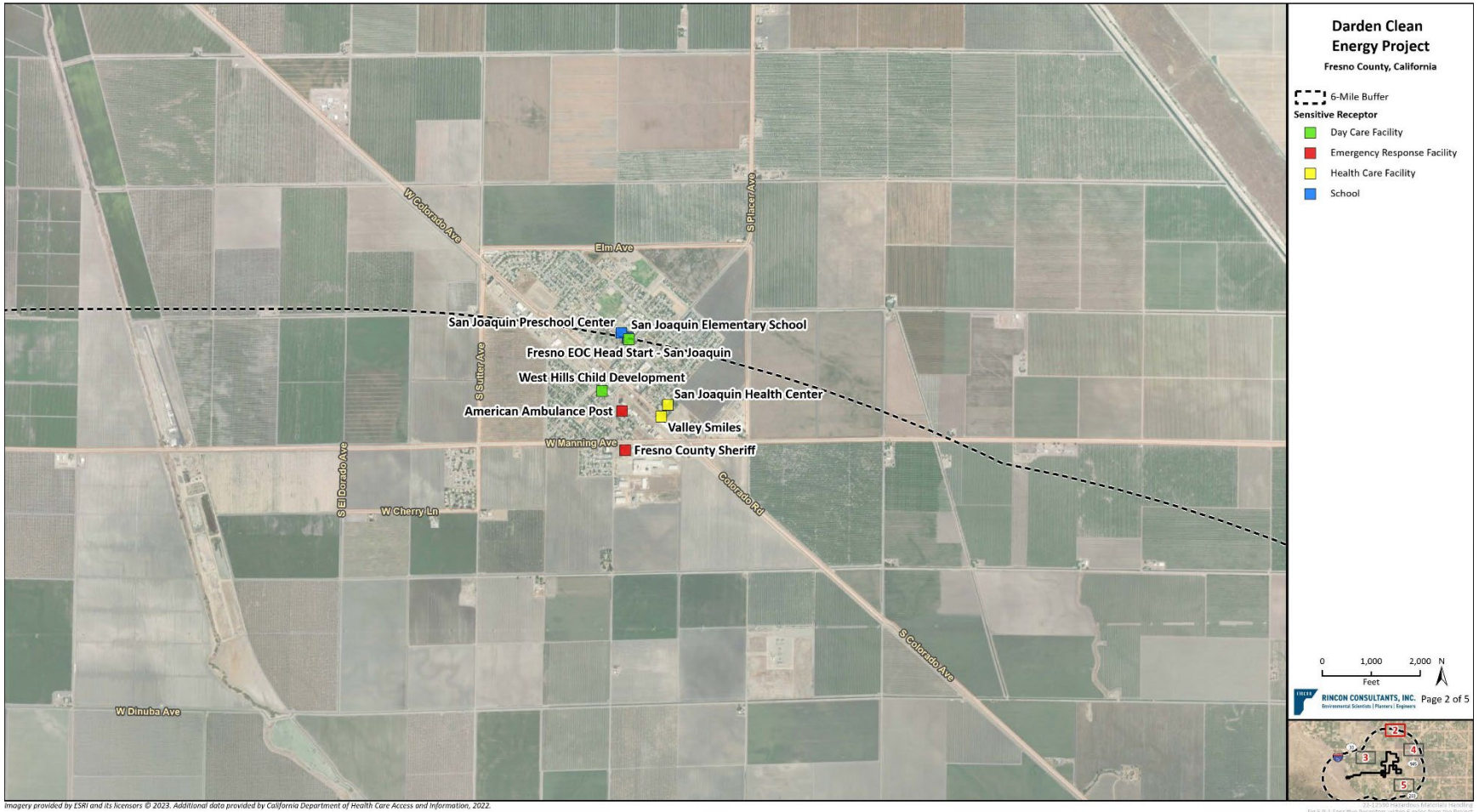


Figure 5.9-1c Sensitive Receptors Within 6 Miles of the Project (Mapbook Page 3)

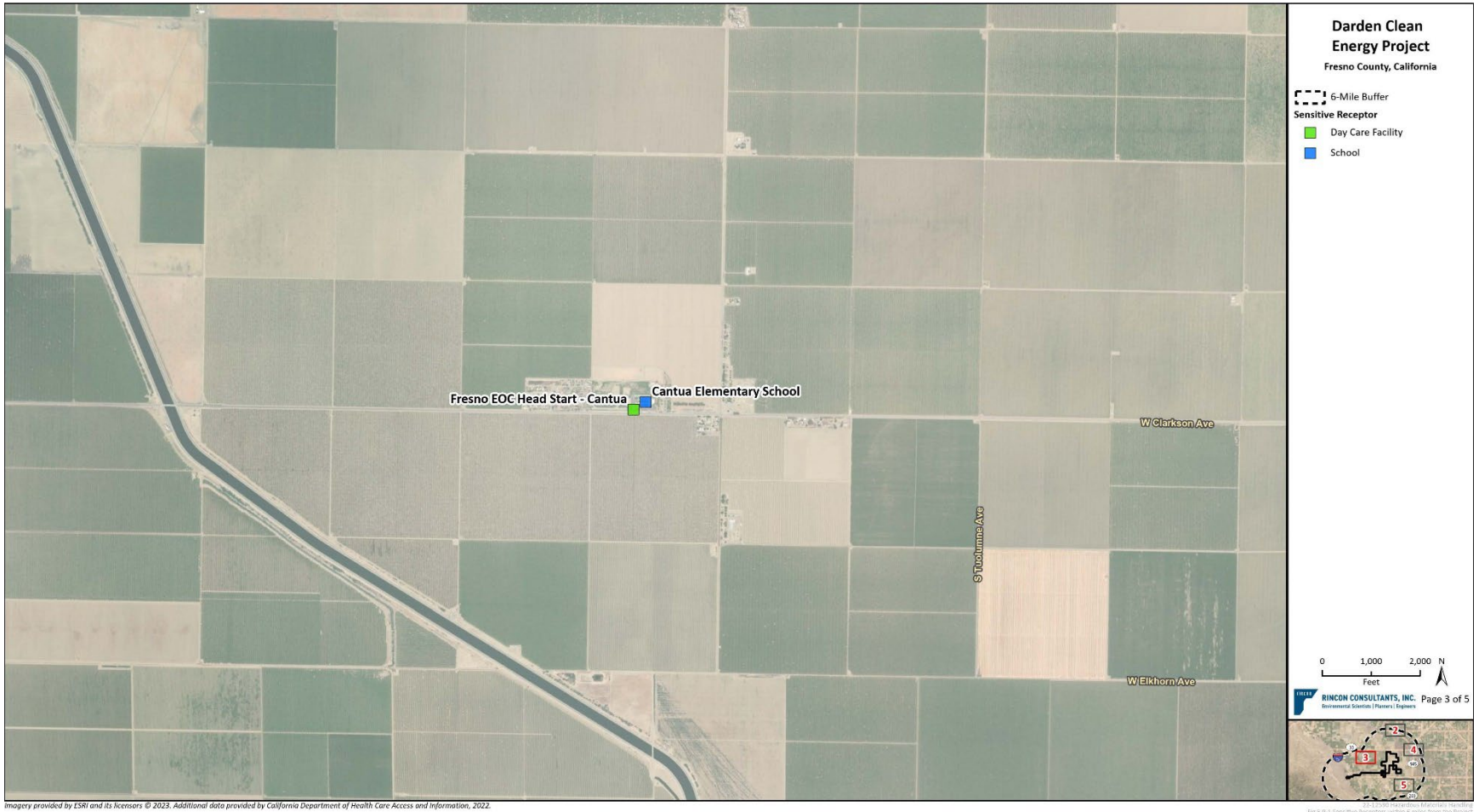


Figure 5.9-1d Sensitive Receptors Within 6 Miles of the Project (Mapbook Page 4)

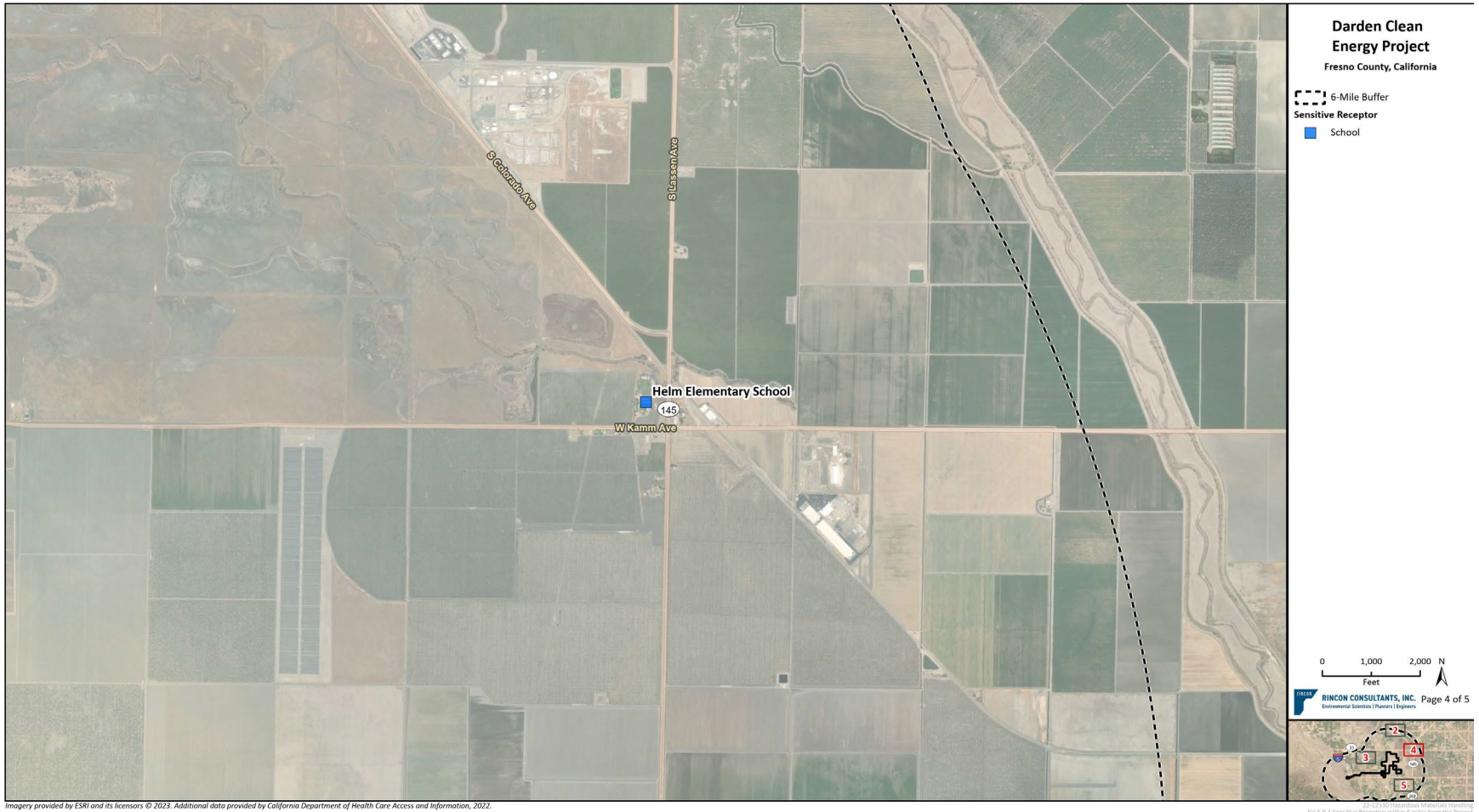
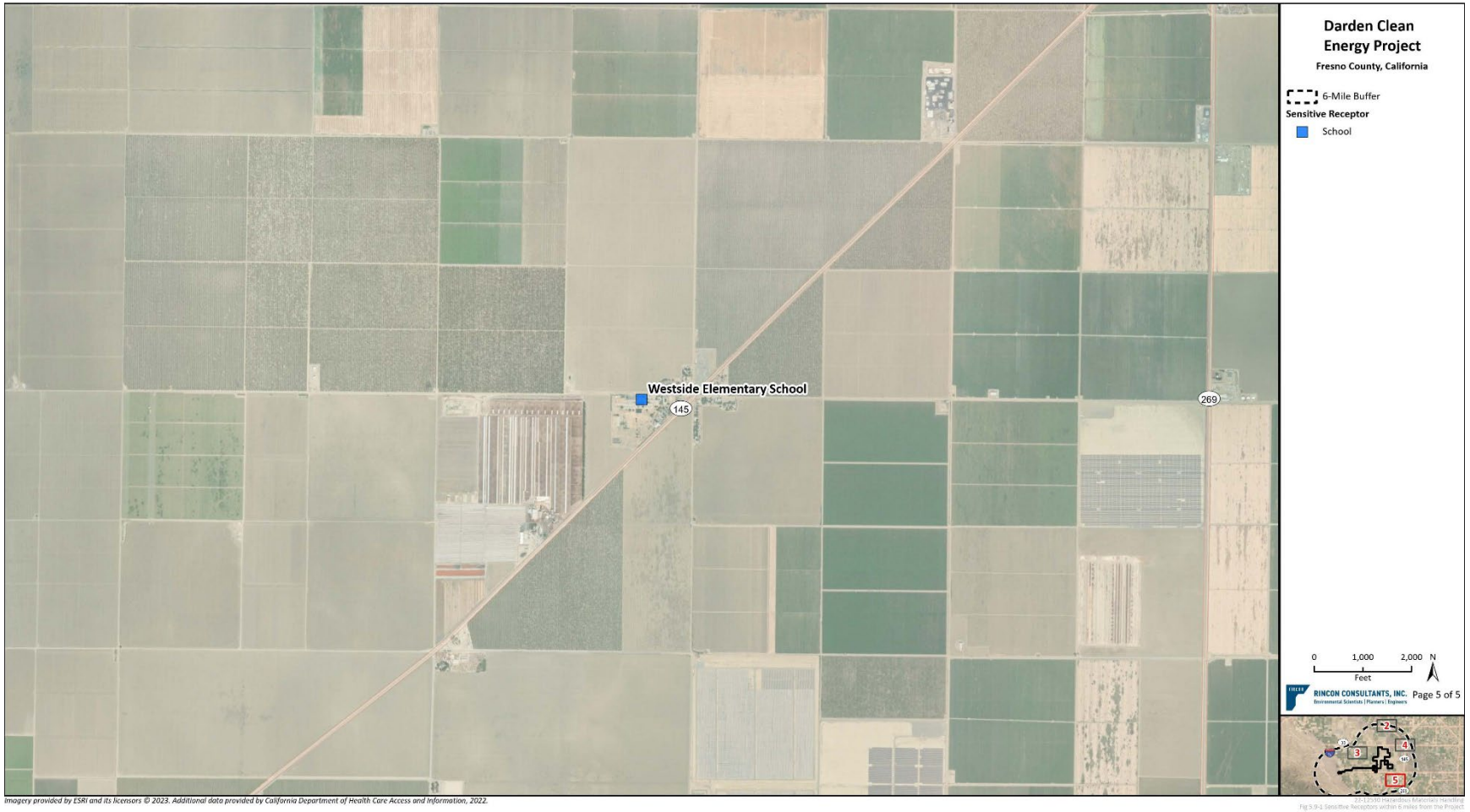


Figure 5.9-1e Sensitive Receptors Within 6 Miles of the Project (Mapbook Page 5)



5.9.1.2 Project Hazardous Materials Use

The Project would use hazardous materials during construction and operations and would comply with applicable laws and regulations for the storage of these materials to minimize the potential for accidental release of hazardous materials. Additionally, the Project would conduct emergency response planning to address public health concerns regarding hazardous materials storage and use. The following sections describe the use of hazardous materials at the Project, followed by tables detailing the hazardous materials used and their characteristics, quantities, locations, and health hazards. Storage locations for the hazardous materials that would be used during construction and operations are described in Table 5.9-1. Table 5.9-2 presents information about the hazardous materials that would be used during construction and operations, including trade names, chemical names, Chemical Abstract Service (CAS) numbers, maximum quantities on-site, reportable quantities (RQ), California accidental release program (CalARP) threshold planning quantities (TPQ), and status as Proposition 65 chemicals (chemicals known to be carcinogenic or cause reproductive problems in humans). Health hazards, toxicity, flammability, and chemical incompatibility information are summarized for these materials in Table 5.9-3. Toxic effects and exposure levels for regulated substances are summarized in Table 5.9-4.

Construction

Hazardous materials would be on-site during construction of the Project, including gasoline, diesel fuel, propane, motor oil, coolant, hydraulic fluid, paint, adhesives, sealants, coolants, lubrication, and lithium-ion batteries or lead acid batteries. There are no feasible alternatives to vehicle fuels and oils for operating construction equipment. The types of paint required are dictated by the types of equipment and structures that must be coated and by the service conditions and environment.

No regulated substances, as defined by California's Health and Safety Code, Section 25531, would be used during construction of the Project.

Operations

Hazardous materials would be used on-site during operation and maintenance of the Project, including gasoline, diesel, motor oil, hydraulic fluid, mineral oil, sealants, adhesives, paint, sulfuric acid, hydrogen, and lithium ion batteries or lead acid batteries.

Decommissioning

Decommissioning would include the removal and transportation of all Project components from the Project site, except for the utility switchyard. All dismantling, removal, recycling, and disposal of materials generated during decommissioning, including hazardous materials, would comply with rules, regulations, and prevailing Federal, State, and local laws at the time decommissioning is initiated and would use approved local or regional disposal or recycling sites as available.

Table 5.9-1 Use and Location of Hazardous Materials

Chemical Name	Use/Purpose	Quantity	Storage Location	State	Type of Storage Container	Project Phase
Cleaning chemicals/ detergents	Cleaning	NA	O&M Building	Liquid	Cans, buckets	Construction and/or O&M
Paint	Construction and O&M	NA	O&M Building	Liquid	Cans, buckets	Construction and/or O&M
Diesel	O&M	400 gallons	ASTs for backup generator(s)	Liquid	AST	O&M
Diesel (dyed and clear)	Fueling Equipment	14,000 gallons	Office Trailers and/or Tooling Connex Boxes	Liquid	AST	Construction
Propane	Construction	1,600 gallons	O&M Building	Gas	Pressurized tank	Construction
Adhesives	Construction and O&M	NA	O&M Building	Liquid, Solid	Bottles	Construction and/or O&M
Sealants	Construction and O&M	NA	O&M Building	Liquid	Bottles	Construction and/or O&M
Hydraulic fluids	O&M	215,800 gallons	Transformers	Liquid	Cans, ASTs	O&M
Sulfur hexafluoride	O&M	620 gallons	HV breakers	Gas	Cylinders	Construction and/or O&M
Mineral oil	O&M	355,000 gallons	GSU transformers	Liquid	Drums, ASTs	Construction and/or O&M
Sulfuric acid	O&M	690 gallons	Battery cells	Liquid	In cells	Construction and/or O&M
Ethylene glycol solution	BESS	NA	BESS	Liquid	NA	Construction and/or O&M
1,1,1,2-tetrafluororethane	BESS	NA	BESS	Gas	Cylinders	Construction and/or O&M
Gasoline	O&M	50 gallons	Flammables storage locker outside O&M Building	Liquid	Cans	O&M
Gasoline	Fueling Equipment	1,800 gallons	Flammables storage locker outside O&M Building	Liquid	Cans	Construction
Coolant	Construction and O&M	50 gallons	NA	Liquid	Cans	Construction and/or O&M
Lubricants	Construction and O&M	NA	NA	Liquid	Cans, ASTs	Construction and/or O&M
Hydrogen	O&M	400 gallons	Specialty areas	Gas	Under containment (e.g., cylinder)	Construction and/or O&M
Lithium ion batteries or lead-acid battery	Construction and O&M	NA	Energy storage	Solid	NA	Construction and/or O&M

NA = not available

Table 5.9-2 Chemical Inventory, Description of Hazardous Materials On-site, and Reportable Quantities

Trade Name	Chemical Name	CAS Number	Maximum Quantity On-site	CERCLA SARA RQ [a]	RQ of Material as Used On-site [b]	EHS TPQ [c]	Regulated Substance TQ [d]	Prop 65
Cleaning chemicals/ detergents	Various	Various	NA	--	--	--	--	No
Paint	Various	Various	NA	--	--	--	--	No
Diesel No. 2	Diesel No. 2	68476-34-6	2,000 gallons	--	--	--	--	No
Propane	Propane	74-98-6	1,600 gallons	--	--	--	--	No
Adhesives	Various	Various	NA	--	--	--	--	No
Sealants	Various	Various	NA	--	--	--	--	No
Hydraulic fluid (FR3 natural ester fluid)	FR3	None	427,380 gallons	42 gallons [e]	42 gallons [e]	--	--	No
Sulfur hexafluoride (SF6)	Sulfur hexafluoride	2551-62-4	620 gallons	--	--	--	--	No
Parrafin oil	Mineral oil	8042-47-5	210,215 gallons	42 gallons [e]	42 gallons [e]	--	--	No
Electrolyte	Sulfuric Acid	7664-93-9	690 gallons	1,000 lbs	3,333 lbs	1,000 lbs	1,000 lbs	Yes
Ethylene glycol solution	Ethylene glycol solution	107-21-1	NA	--	--	--	--	Yes
1,1,1,2-tetrafluororethane	1,1,1,2-tetraflurorethane	811-97-2	NA	--	--	--	--	No
Gasoline	Gasoline	8006-61-9; 86290-85-1	50 gallons	--	--	--	--	No
Coolant	Various	Various	50 gallons	--	--	--	--	No
Lubricants	Oil	None	NA	42 gallons [e]	42 gallons [e]	--	--	No
Hydrogen	Hydrogen	1333-74-0	400 gallons	--	--	--	10,000 lbs	No
Lithium ion batteries or lead-acid battery	Lithium Ion Batteries or Lead-Acid Battery	Various	NA	--	--	--	--	No

[a] RQs are for a pure chemical, per CERCLA SARA (ref. 40 CFR Section 302, Table 302.4). Releases equal to or greater than the RQ must be reported. Under California law, any amount that has a realistic potential to adversely affect the environment and human health or safety must be reported.

[b] RQ for materials as used on-site. Since some of the hazardous materials are mixtures that only contain a percentage of an RQ, the RQ of the mixture can be different than for a pure chemical. For example, if a substance only contains 10 percent of a reportable chemical and the RQ is 100 pounds, the RQ for that material will be (100 pounds)/(10%) = 1,000 pounds.

[c] EHS TPQ (ref. 40 CFR Part 355, Appendix A). If quantities of EHS materials equal to or greater than the TPQ are handled or stored on-site, they must be registered with the local Administering Agency (i.e., Fresno County Environmental Health – CUPA/Hazardous Materials Handling Program).

[d] TQ is from Title 19 CCR Section 2770.5 (state) or Title 40 CFR Section 68.130 (federal).

[e] State RQ for oil spills that will reach California state waters [CA Water Code Section 13272(f)]

Trade Name	Chemical Name	CAS Number	Maximum Quantity On-site	CERCLA SARA RQ [a]	RQ of Material as Used On-site [b]	EHS TPQ [c]	Regulated Substance TQ [d]	Prop 65

Notes:

--: No reporting requirements. The chemical has no listed threshold under this requirement.

NA: not available

CAS: Chemical Abstract Service

CCR: California Code of Regulations

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

CFR: Code of Federal Regulations

EHS: Extremely Hazardous Substances

Lbs: pounds

Prop 65: Proposition 65

RQ: Reportable Quantity

SARA: Superfund Amendments and Reauthorization Act

TPQ: Threshold Planning Quantity

TQ: Threshold Quantity

Table 5.9-3 Toxicity, Reactivity, and Flammability of Hazardous Substances Stored On-site

Hazardous Material	Physical Description	Health Hazard/Toxicity	Reactivity and Incompatibilities	Flammability [a]
Cleaning chemicals/ detergents	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels
Paint	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels
Diesel No. 2	Oily, light liquid	May be carcinogenic	Strong oxidizers, acids	Flammable
Propane	Colorless, odorless gas	Liquid can cause burns similar to frostbite	Strong oxidizers	Flammable
Adhesives	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels
Sealants	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels
Hydraulic fluid (FR3 natural ester fluid)	Light green liquid	Minimal irritation or no effect	Strong oxidizers, Strong Alkali	Combustible
Sulfur hexafluoride (SF6)	Colorless, odorless gas	Can displace oxygen and cause rapid suffocation	None	Nonflammable
Parrafin oil	Oily, colorless liquid	May be fatal if swallowed or enters airways	Strong oxidizers	Combustible
Sulfuric acid	Colorless liquid	Causes burns by all exposure routes	Strong oxidizers, combustible material, bases, organic materials, reducing agents, finely powdered metals, peroxides	Nonflammable
Ethylene glycol solution	Viscous, colorless liquid	May cause skin, eye, and respiratory tract irritation	Strong oxidizers, strong acids, strong bases, aldehydes	Combustible
1,1,1,2-tetraflurorethane	Colorless gas, faint ethereal odor	Liquid can cause burns similar to frostbite	None	Nonflammable
Gasoline	Transparent to light yellow liquid	Carcinogenic, may cause irritation to skin, nose, throat, and lungs	Strong oxidizers	Flammable
Coolant	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels

Hazardous Material	Physical Description	Health Hazard/Toxicity	Reactivity and Incompatibilities	Flammability [a]
Lubricants	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels	Refer to individual chemical labels
Hydrogen	Odorless, colorless gas	Contact with rapidly expanding gas may cause burns or frostbite	Strong oxidizers	Flammable

Notes:

[a] In accordance with Caltrans regulations, under 49 CFR Section 173: flammable liquids have a flash point less than or equal to 141°F; combustible liquids have a flash point greater than 141°F

Source: Data were obtained from Material Safety Data Sheets.

Table 5.9-4 Toxic Effects and Exposure Levels of Regulated Substances

Chemical Name	Toxic Effects	Exposure Levels
Sulfuric acid	Contact can cause burns by all exposure routes. Inhalation of vapor may cause serious lung damage. Chronic exposure may cause tracheobronchitis, stomatitis, conjunctivitis, and gastritis. Gastric perforation and peritonitis may occur and potentially followed by circulatory collapse.	Occupational Exposures: PEL: 1 mg/m^3 OSHA TLV: 0.2 mg/m^3 ACGIH TWA: 1 mg/m^3 NIOSH STEL: 3 mg/m^3 Cal/OSHA Hazardous Concentrations: IDLH: 15 ppm Sensitive Receptors: ERPG-1: 2 ppm ERPG-2: 10 ppm ERPG-3: 120 ppm
Hydrogen	Contact with liquefied hydrogen can cause severe burns and frostbite to the skin and eyes. Very high levels of hydrogen gas can decrease the amount of oxygen in the air and cause suffocation with symptoms of headaches, dizziness, weakness, nausea, vomiting, loss of coordination and judgement, increased breathing rate, and loss of consciousness and death.	LEL: 4% UEL: 75% Hydrogen gas decreases the amount of available Oxygen. Oxygen content in worker breathing zone should be at least 19.5% by volume.

Notes:
ACGIH: American Conference of Governmental Industrial Hygienists
Cal/OSHA: California Occupational Safety and Health Administration
ERPG: Emergency Response Planning Guidelines
IDLH: Immediately Dangerous to Life and Health
LEL: Lower Explosive Limit
NIOSH: National Institute for Occupational Safety and Health
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit, 8-hour TWA
STEL: Short Term Exposure Limit
TLV: Threshold Limit Value
TWA: Time Weighted Average
UEL: Upper Explosive Limit

5.9.1.3 Safe Handling of Hazardous Materials

Construction

Construction of the Project would involve the on-site storage of relatively small quantities of hazardous materials as identified in Table 5.9-1 and elaborated upon in Table 5.9-2, and Table 5.9-3. To ensure safe handling of hazardous materials during construction, various health and safety programs and plans would be implemented as outlined in Section 5.10, *Worker Safety*. Among those included are an illness and injury prevention program (IIPP), construction personal protective equipment (PPE) program, and soil management plan.

Operations

Operation of the Project would involve the use of hazardous materials, as identified in Table 5.9-1 and elaborated upon in Table 5.9-2, Table 5.9-3, and Table 5.9-4. To ensure safe handling of hazardous materials during facility operations, various health and safety programs and plans would be implemented, as outlined in Section 5.10, *Worker Safety*. Among those included are an IIPP, O&M PPE program, emergency action plan, hazardous materials business plan (HMBP), and spill prevention, control, and countermeasure plan (SPCC).

Safe Handling Measures

During Project construction and operation, the following hazardous waste transportation requirements and procedures would apply:

- **Requirements of haulers:** Qualified haulers would be retained to transport hazardous waste from the Project. The selected haulers would be fully licensed and insured to transport hazardous waste. Haulers would follow all applicable requirements in the Code of Federal Regulations with regard to loading, unloading, and general handling, based on transport mode.
- **Truck loading operations**: Trucks would be loaded at designated staging areas for transportation to the designated receiving facility. Stray material on vehicles, tires, or the lip of the container, etc., would be removed manually with a brush. The container of the truck would be covered to prevent release of materials from the truck during transport.
- **Transportation:** Hazardous waste haulers would have a valid DTSC registration and would satisfy the following requirements:
    - Vehicles would have passed an annual inspection;
    - Vehicle operators would be trained in the safe handling of the material;
    - Haulers would maintain the ability to pay damages caused by their operations through proper insurance coverage;
    - Haulers would have licenses issued by the CHP for transportation of hazardous waste;
    - Haulers would have a California Environmental Protection Agency identification number;
    - Haulers would comply with the Uniform Hazardous Waste Manifest System; and,
    - Haulers would take certain actions in response to hazardous waste discharges during transport (e.g., covering the load to prevent the discharge of dust/particulates into the atmosphere during hauling).
- **Route**: In accordance with all applicable laws, hazardous waste transportation routes would be limited to arterial streets and freeways approved for truck traffic to minimize potential impacts in the local neighborhoods and sensitive receptors. Transportation, as feasible, would be conducted in accordance with the National Hazardous Material Route Registry – USDOT – Federal Motor Carrier Safety Administration Hazardous Materials designated, preferred, or prescribed routes for transportation of hazardous waste in California. Truck routes would be determined in advance of any hauling activity once a receiving facility is selected, as necessary. If off-hauling is required, an appropriate off-site facility would be identified, and a haul route would be determined such that impacts to sensitive receptors are minimized.
- **Traffic control procedures**: Hazardous waste to off-site receiving facilities would be transported in trucks from the designated staging areas. Prior to loading, trucks would be staged in a controlled and orderly manner to avoid impacts on the local streets. Traffic would be

coordinated in such a manner that, at any given time, a limited number of trucks would be at the Project to reduce truck traffic on surrounding surface streets. While at the Project, vehicles would be required to maintain slow speeds (e.g., less than five miles per hour) for safety purposes.

- **Receiving facility**: Waste characterization sampling results would be provided to the receiving facility to profile the waste.
- **Shipping documentation and record keeping**: Hazardous waste transportation would comply with all applicable federal, State, and local laws, including, but not limited to the, USDOT regulations, California Vehicle Code, CHP Regulations, California State Fire Marshall Regulations, and the California Health and Safety Code, to the extent applicable. These requirements include keeping of appropriate records during transportation activities. An authorized representative would be responsible for maintaining a record book of soil management and trucking activities during on-site work. The record book would serve to document observations, on-site personnel, and truck arrival and departure times. The appropriate Uniform Hazardous Waste Manifest would be used to track the movement of hazardous waste, if any, from the point of generation to the receiving facility. Prior to transporting the hazardous waste, if any, off-site, an authorized representative would sign each manifest. Copies of each manifest for each truckload would be maintained in each truck during transport to the receiving facility, as well as on-site.
- **Contingency Plan**: The hauler would be required to have a contingency plan prepared for emergency situations (vehicle breakdown, accident, diesel spill, fire, explosion, etc.) during transportation of hazardous waste, if any, off-site. Once the hauler is selected, a contingency plan would be reviewed and available on-site.

5.9.2 Regulatory Setting

A review of existing relevant LORS was conducted to understand the regulatory context for hazardous materials surrounding the Project. This review of applicable federal, state, and local policies and regulations including California Environmental Quality Act, California Health and Safety Code, Fresno County's General Plan, and Fresno County Code of Ordinances. These are detailed in Section 5.9.5.

5.9.3 Impact Analysis

The following subsections discuss the potential direct and indirect impacts related to hazardous materials handling from construction and operation (including maintenance) of the Project.

5.9.3.1 Methodology

To identify and assess potential impacts related to hazardous materials handling, Rincon Consultants, Inc., reviewed publicly available information including the:

- State Water Resources Control Board (SWRCB) GeoTracker
- DTSC EnviroStor
- List of solid waste disposal sites identified by the SWRCB with waste constituents above hazardous waste levels outside the waste management unit
- List of "active" Cease and Desist Orders and Cleanup Abatement Orders
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC.

In addition, Rincon Consultants, Inc. reviewed information provided by the Project applicant regarding the types of hazardous materials that would be used during construction and operation of the Project. Hazardous materials generated during decommissioning of the Project are unknown at this time but anticipated to be similar to hazardous materials used for Project construction.

5.9.3.2 Impact Evaluation Criteria

The potential for impacts related to hazardous materials were evaluated using the criteria described in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (sections 15000-15387, Title 14, California Code of Regulations, Chapter 3). A project would have a significant environmental impact in terms of hazardous materials if it would do the following:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment; and/or
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impact HAZ-1

Threshold:	Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
Threshold:	Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The following subsections provide an analysis of Project impacts regarding the creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Protocols related to worker safety when handling hazardous materials are described in Section 5.10, *Worker Safety*.

Solar Facility, Step-Up Substation, and Gen-Tie

Construction

Less than Significant Impact. Construction of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would involve the on-site storage of relatively small quantities of hazardous materials. These hazardous materials would be limited to gasoline, diesel fuel, propane, motor oil, coolant, and hydraulic fluid. If small releases of hazardous materials occur during construction, the affected material would be cleaned up and properly disposed of. However, if a larger release of a hazardous material occurs, the affected material would be sampled,

characterized, and disposed of according to the procedures outlined in Section 5.11, *Waste Management*. No regulated substances, as defined by California's Health and Safety Code, Section 25531, would be used during construction of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components.

During construction, hazardous materials would be transported solely during delivery and removal from the Project site, on an intermittent basis as needed for construction. All transportation of hazardous substances would occur with Department of Transportation (DOT)-approved personnel and trucking/transport equipment. The hazardous waste transportation requirements, described in Section 5.9.1.3, would minimize the potential for an accidental release of hazardous materials to occur, and emergency spill and response procedures would be specified within the Project-specific Contingency Plan. Hazardous materials used during construction would be stored near the office trailers in various storage containers including cans, pressurized tanks, and bottles. Best management practices (BMPs), such as double containment, would be implemented by contractor personnel for the use of these small, on-site quantities of hazardous materials. All hazardous materials used and stored on-site during construction would be securely stored in appropriate containers in compliance with 40 CFR Part 262 and 40 CFR 1910.12. In the unlikely event that an accidental release occurs, no schools or other sensitive receptors are located within 0.5-mile of the Project site. In the unlikely event that a fire or explosion occurs due to handling of hazardous materials, procedures from the Project's Construction Injury and Illness Prevention Program, Construction Fire Protection and Prevention Program, and Construction Personal Protective Equipment Program would be implemented to reduce risks to worker safety. Additionally, construction would not involve the handling of acutely hazardous materials that would have the potential to generate significant off-site consequences, and as such, no protocol for modeling of hazardous materials releases is included and no modelling is proposed. Therefore, construction of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would result in a less than significant impact involving the routine transport, use, disposal, or accidental release of hazardous materials.

Operation

Less than Significant Impact. Operation of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would involve the use of hazardous materials, as identified in Table 5.9-1 and elaborated upon in Table 5.9-2, Table 5.9-3, and Table 5.9-4. No regulated substances would be used during operation and maintenance of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components. Hazardous materials used during Project operation would be contained within designated hazardous materials storage areas throughout the Project site. All hazardous materials used and stored on-site during Project operation would be securely stored in appropriate containers in compliance with 40 CFR Part 262 and 40 CFR 1910.12. During operation, procedures for the use and handling of hazardous materials would be described within the Project-specific hazardous materials handling plans, facility health and safety plans, the Project Hazardous Materials Business Plan (HMBP), and spill prevention, control, and countermeasure (SPCC) plan. Operation of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would not involve the routine transportation of hazardous materials to and from the Project site. Therefore, operation of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would have a less than significant impact involving the routine transport, use, disposal, or accidental release of hazardous materials.

BESS

Construction

Less than Significant Impact. Construction of the Options 1 and 2 BESS component would involve the on-site storage of relatively small quantities of hazardous materials. These hazardous materials would be limited to gasoline, diesel fuel, propane, motor oil, coolant, and hydraulic fluid. No regulated substances, as defined by California's Health and Safety Code, Section 25531, would be used during construction of the Options 1 and 2 BESS component. During construction, hazardous materials would be transported solely during delivery and removal from the Project site, on an intermittent basis as needed by construction. All transportation of hazardous substances would occur with DOT-approved personnel and trucking/transport equipment. The hazardous waste transportation requirements, described in Section 5.9.1.3, would minimize the potential for an accidental release of hazardous materials to occur, and emergency spill and response procedures would be specified within the Project-specific Contingency Plan. Hazardous materials used during construction would be stored in the O&M building in various storage containers including cans, pressurized tanks, and bottles. BMPs, such as double containment near office trailers, would be implemented by contractor personnel for the use of these small, on-site quantities of hazardous materials. All hazardous materials used and stored on-site during construction would be securely stored in appropriate containers in compliance with 40 CFR Part 262 and 40 CFR 1910.12. In the unlikely event that an accidental release occurs, no schools or other sensitive receptors are located within 0.5-mile of the Project site, which is the distance specified in California's Health and Safety Code, Section 25510.3, where in the event of an accidental release emergency response personnel would be required to notify the school. In the unlikely event that a fire or explosion occurs due to handling of hazardous materials, procedures from the Project's Construction Injury and Illness Prevention Program, Construction Fire Protection and Prevention Program, and Construction Personal Protective Equipment Program would be implemented to reduce risks to worker safety. Additionally, construction would not involve the handling of acutely hazardous materials that would have the potential to generate significant off-site consequences, and as such, no protocol for modeling of hazardous materials releases is included and no modelling is proposed. Therefore, construction of the Options 1 and 2 BESS component would result in a less than significant impact involving the routine transport, use, disposal, or accidental release of hazardous materials.

Operation

Less than Significant Impact. Operation of the Options 1 and 2 BESS component would involve the use of hazardous materials, as identified in Table 5.9-1 and elaborated upon in Table 5.9-2, Table 5.9-3, and Table 5.9-4. Hazardous materials used during operation and maintenance activities would include regulated substances such as sulfuric acid; however, this material would be securely stored in appropriate containers in compliance with 40 CFR Part 262 and 40 CFR 1910.12. and the project applicant would prepare an RMP that specifies safe handling and emergency response procedures. Hazardous materials used during Project operation would be contained within designated hazardous materials storage areas throughout the Project site. During operation, procedures for the use and handling of hazardous materials would be described within the Project-specific hazardous materials handling plans, facility health and safety plans, the Project Hazardous Materials Business Plan (HMBP), and spill prevention, control, and countermeasure (SPCC) plan. Operation of Options 1 and 2 BESS component would not involve the routine transportation of hazardous materials to and from the Project site. In the unlikely event that an accidental release occurs, no schools or other sensitive receptors are located within 0.5-mile of the Project site. In the

unlikely event that a fire or explosion occurs due to hazardous materials present during operation and maintenance activities, procedures from the Project's Construction Injury and Illness Prevention Program, Construction Fire Protection and Prevention Program, and Construction Personal Protective Equipment Program would be implemented to reduce risks to worker safety. These procedures include establishment of an off-site communications center to be used in the event of a fire or explosion; a description of fire protections that would be implemented during operation and maintenance activities, including permanent water systems, gaseous agent systems, and fire extinguishers; a list of all major fire hazards; an outline of procedures to control accumulation of flammable and combustible waste materials; and an outline of procedures for regular maintenance of safeguards installed on heat-producing equipment to prevent or control sources of ignition or fires. Therefore, operation of the Options 1 and 2 BESS component would have a less than significant impact involving the routine transport, use, disposal, or accidental release of hazardous materials.

Green Hydrogen Facility

Construction

Less than Significant Impact. Construction of the Options 1 and 2 and alternate location green hydrogen component would involve the on-site storage of relatively small quantities of hazardous materials. These hazardous materials would be limited to gasoline, diesel fuel, propane, motor oil, coolant, and hydraulic fluid. No regulated substances, as defined by California's Health and Safety Code, Section 25531, would be used during construction of the Options 1 and 2 and alternate green hydrogen component. All transportation of hazardous substances would occur with DOT-approved personnel and trucking/transport equipment. The hazardous waste transportation requirements, described in Section 5.9.1.3, would minimize the potential for an accidental release of hazardous materials to occur, and emergency spill and response procedures would be specified within the Project-specific Contingency Plan. Hazardous materials used during construction would be stored in the O&M building in various storage containers including cans, pressurized tanks, and bottles. During construction, hazardous materials would be transported solely during delivery and removal from the Project site, on an intermittent basis as needed by construction. In the unlikely event that an accidental release occurs, no schools or other sensitive receptors are located within 0.5-mile of the Project site. In the unlikely event that a fire or explosion occurs due to handling of hazardous materials, procedures from the Project's Construction Injury and Illness Prevention Program, Construction Fire Protection and Prevention Program, and Construction Personal Protective Equipment Program would be implemented to reduce risks to worker safety. Additionally, construction would not involve the handling of acutely hazardous materials that would have the potential to generate significant off-site consequences, and as such, no protocol for modeling of hazardous materials releases is included and no modelling is proposed. BMPs, such as double containment near office trailers, would be implemented by contractor personnel for the use of these small, on-site quantities of hazardous materials. All hazardous materials used and stored on-site during construction would be securely stored in appropriate containers in compliance with 40 CFR Part 262 and 40 CFR 1910.12. Therefore, construction of the Options 1 and 2 and alternate location green hydrogen component would result in a less than significant impact involving the routine transport, use, disposal, or accidental release of hazardous materials.

Operation

Less than Significant Impact. Operation of the Options 1 and 2 and alternate location green hydrogen component would involve the use of hazardous materials, as identified in Table 5.9-1 and elaborated upon in Table 5.9-2, Table 5.9-3, and Table 5.9-4. Hazardous materials used during operation and maintenance activities would include regulated substances such as sulfuric acid and hydrogen; however, these materials would be securely stored in appropriate containers in compliance with 40 CFR Part 262 and 40 CFR 1910.12 and the project applicant would prepare an RMP that specifies safe handling and emergency response procedures. Hazardous materials used during Project operation would be contained within designated hazardous materials storage areas throughout the Project site. During operation, procedures for the use and handling of hazardous materials would be described within the Project-specific hazardous materials handling plans, facility health and safety plans, the Project Hazardous Materials Business Plan (HMBP), and spill prevention, control, and countermeasure (SPCC) plan. Operation of Options 1 and 2 and alternate green hydrogen component would involve the regular delivery of hydrogen to the Project site, which would comply with the above hazardous waste transportation requirements. In the unlikely event that an accidental release occurs, no schools or other sensitive receptors are located within 0.5-mile of the Project site. Additionally, Project operation would not involve the handling of acutely hazardous materials that would have the potential to generate significant off-site consequences, and as such, no protocol for modeling of hazardous materials releases is included and no modelling is proposed. Therefore, operation of Options 1 and 2 and alternate location green hydrogen component would have a less than significant impact involving the routine transport, use, disposal, or accidental release of hazardous materials.

Utility Switchyard

Construction

Less than Significant Impact. Construction of the utility switchyard would involve the on-site storage of relatively small quantities of hazardous materials. These hazardous materials would be limited to gasoline, diesel fuel, propane, motor oil, coolant, and hydraulic fluid. No regulated substances, as defined by California's Health and Safety Code, Section 25531, would be used during construction of the utility switchyard. During construction, hazardous materials would be transported solely during delivery and removal from the Project site, on an intermittent basis as needed by construction. All transportation of hazardous substances would occur with DOT-approved personnel and trucking/transport equipment. The hazardous waste transportation requirements, described in Section 5.9.1.3, would minimize the potential for an accidental release of hazardous materials to occur, and emergency spill and response procedures would be specified within the Project-specific Contingency Plan. Hazardous materials used during construction would be stored in the O&M building in various storage containers including cans, pressurized tanks, and bottles. In the unlikely event that an accidental release occurs, no schools or other sensitive receptors are located within 0.5-mile of the Project site. In the unlikely event that a fire or explosion occurs due to handling of hazardous materials, procedures from the Project's Construction Injury and Illness Prevention Program, Construction Fire Protection and Prevention Program, and Construction Personal Protective Equipment Program would be implemented to reduce risks to worker safety. Additionally, Project construction would not involve the handling of acutely hazardous materials that would have the potential to generate significant off-site consequences, and as such, no protocol for modeling of hazardous materials releases is included and no modelling is proposed. BMPs, such as double containment near office trailers, would be implemented by

contractor personnel for the use of these small, on-site quantities of hazardous materials. Therefore, construction of the utility switchyard would result in a less than significant impact involving the routine transport, use, disposal, or accidental release of hazardous materials.

Operation

Less than Significant Impact. Operation of the utility switchyard would be performed by Pacific Gas & Electric and would involve the use of hazardous materials, as identified in Table 5.9-1 and elaborated upon in Table 5.9-2, Table 5.9-3, and Table 5.9-4. No regulated substances would be used during operation and maintenance of the utility switchyard. Hazardous materials used during operation would be contained within designated hazardous materials storage areas within the utility switchyard. During operation, procedures for the use and handling of hazardous materials would be described within plans prepared by the utility and may include hazardous materials handling plans, facility health and safety plans, and spill prevention, control, and countermeasure (SPCC) plan. Operation of the utility switchyard would not involve the routine transportation of hazardous materials to and from the Project site. In the unlikely event that an accidental release occurs, no schools or other sensitive receptors are located within 0.5-mile of the Project site. Therefore, operation of the utility switchyard would have a less than significant impact involving the routine transport, use, disposal, or accidental release of hazardous materials.

Overall Project

Less than Significant Impact. The overall Project would involve the transport, use, and disposal of hazardous materials during both Project construction and operation. As detailed above, Project construction and operation would follow hazardous waste transportation procedures and applicable procedures from the Project-specific RMP, HMBP, and other hazardous materials handling plans, which would minimize impacts associated with the creation of a hazard through the transport, use, disposal, or accidental release of hazardous materials. Therefore, impacts involving the creation of a hazard through the transport, use, disposal, or accidental release of hazardous materials would be less than significant.

Impact HAZ-2

Threshold:	Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

As shown in Figure 5.9-1, the nearest schools to the Project site are the Westside Elementary School (approximately 2 miles south of Mt. Whitney Avenue), Cantua Elementary School (approximately 3.3 miles northwest of the Project site on West Clarkson Avenue), and the Helm Elementary School (approximately 3.6 miles northeast of the Project site at the intersection of West Kamm Avenue and SR 145). No schools are within 0.25-mile of the Project site; therefore, no impact would occur.

Impact HAZ-3

Threshold:	Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Government Code §65962.5, enacted in 1985, established a list of sites that may impact local permitting processes and compliance with CEQA (Cortese List). The Cortese list is available via the following online data resources:

- SWRCB GeoTracker
- DTSC EnviroStor
- List of solid waste disposal sites identified by the SWQCB with waste constituents above hazardous waste levels outside the waste management unit.
- List of "active" Cease and Desist Orders and Cleanup Abatement Orders
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC.

An examination of the above databases indicates that there are no sites on the Cortese List located within 1,000 feet of the Project site. The closest site is the Air-Way Farms-Five Points Ranch Shop, at 18878 West Mount Whitney Avenue in Five Points. The site is located approximately 1.37 miles southeast of the southeast corner of the Project site. The Project would not impact this Cortese List site and would not present a significant hazard to public health or the environment. Therefore, no impact would occur.

Impact HAZ-4

Threshold:	Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

In 2018, Fresno County established a Multi-Jurisdictional Hazard Mitigation Plan for the purpose of reducing or eliminating long-term risk to people and property from hazards, including hazardous materials. The County's Multi-Jurisdictional Hazard Mitigation Plan includes goals, objectives, and implementation measures that increase hazards awareness and involve coordination with applicable agencies, such as Caltrans, to minimize hazards. The following subsections analyze the Project's impact to adopted emergency response or evacuation plans, including the County's Multi-Jurisdictional Hazard Mitigation Plan.

Solar Facility, Step-Up Substation, and Gen-Tie

Construction and Operation

No Impact. Construction of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would involve truck trips for the delivery and disposal of construction materials to and from the Project site. Operation of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would not require the routine transport of materials to and from the Project site. During construction and operation, the Project would adhere to all safety practices specified in the County's Multi-Jurisdictional Hazard Mitigation Plan and in the Project-specific HMBP. Additionally, construction trucks would be staged in a controlled and orderly manner to avoid impacts on the

local streets, would be coordinated such that a limited number of trucks would be at the Project to reduce truck traffic on surrounding surface streets, and would be required to maintain slow speeds for safety purposes. Therefore, construction and operation of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would not result in anticipated impacts to emergency response, and there would be no impact involving the impaired implementation or physical interference with an adopted emergency response or evacuation plan.

BESS

Construction and Operation

No Impact. Construction of the Options 1 and 2 BESS component would involve truck trips for the delivery and disposal of construction materials to and from the Project site. Operation of the Options 1 and 2 BESS components would not require the routine transport of materials to and from the Project site. During construction and operation, the Project would adhere to all safety practices specified in the County's Multi-Jurisdictional Hazard Mitigation Plan and in the Project-specific HMBP. Additionally, construction trucks would be staged in a controlled and orderly manner to avoid impacts on the local streets, would be coordinated such that a limited number of trucks would be at the Project to reduce truck traffic on surrounding surface streets, and would be required to maintain slow speeds for safety purposes. Therefore, construction and operation of Options 1 and 2 BESS component would not result in anticipated impacts to emergency response, and there would be no impact involving the impaired implementation or physical interference with an adopted emergency response or evacuation plan.

Green Hydrogen Facility

Construction and Operation

No Impact. Construction and operations of the Options 1 and 2 and alternate green hydrogen component would involve routine transport to and from the Project site. However, the Project would adhere to all safety practices specified in the County's Multi-Jurisdictional Hazard Mitigation Plan, in the Project-specific HMBP, and in the Project-specific RMP. Additionally, construction trucks would be staged in a controlled and orderly manner to avoid impacts on the local streets, would be coordinated such that a limited number of trucks would be at the Project to reduce truck traffic on surrounding surface streets, and would be required to maintain slow speeds for safety purposes. Therefore, construction and operation of Options 1 and 2 and alternate green hydrogen component would not result in anticipated impacts to emergency response, and there would be no impact involving the impaired implementation or physical interference with an adopted emergency response or evacuation plan.

Utility Switchyard

Construction and Operation

No Impact. Construction of the utility switchyard would involve truck trips for the delivery and disposal of construction materials to and from the Project site. Operation of the utility switchyard would not involve the routine transport of materials to and from the Project site. During construction and operation, the Project would adhere to all safety practices specified in the County's Multi-Jurisdictional Hazard Mitigation Plan and in the Project-specific HMBP. Additionally, construction trucks would be staged in a controlled and orderly manner to avoid impacts on the

local streets, would be coordinated such that a limited number of trucks would be at the Project to reduce truck traffic on surrounding surface streets, and would be required to maintain slow speeds for safety purposes. Therefore, construction and operation of the utility switchyard would not result in anticipated impacts to emergency response, and there would be no impact involving the impaired implementation or physical interference with an adopted emergency response or evacuation plan.

Overall Project

No Impact. The Project would result in the addition of traffic to local roadways during construction; however, construction trucks would be staged in a controlled and orderly manner to avoid impacts on the local streets, would be coordinated such that a limited number of trucks would be at the Project to reduce truck traffic on surrounding surface streets, and would be required to maintain slow speeds for safety purposes. Project operation would involve the transport of hydrogen to the green hydrogen component. Impacts to emergency response would be minimized through adherence to safety practices within the County's Multi-Jurisdictional Hazard Mitigation Plan, the Project-specific HMBP, and the Project-specific RMP. Therefore, the Project would have no impact involving the impaired implementation or physical interference with an adopted emergency response or evacuation plan.

5.9.4 Cumulative Impacts

As defined by Public Resources Code Section 21083; Title 14 CCR, Sections 15064 [h], 15065 [c], 15130, and 15355, a cumulative impact refers to a proposed project's incremental effect together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project. Because the Project would cause no impact related to emergency response plans, the Project could not cause or contribute to any significant impact on such resources. As such, cumulatively, the Project would have no impact related to this item and it is not discussed further below.

Overall Project

Areas subject to potential hazardous materials impacts include areas around the Project site that could be affected by a release of hazardous materials, including schools within 0.25 mile. Impacts from releases are usually site-specific and localized to the Project area, but can also include downgradient air, water bodies, groundwater, and areas subject to wildland fire hazards.

Construction of the Project would result in less than significant impacts associated with the transport, use, and disposal of hazardous materials during construction with implementation of appropriate BMPs. The Project would be expected to adhere to all applicable federal, state, and local laws and regulations to reduce the potential impacts from use of hazardous materials to a less than significant level during construction of the Project. Therefore, there would be no cumulatively considerable impacts related to the transport, use, or disposal of hazardous materials.

The Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment with the implementation of appropriate BMPs. Similar to the Project, cumulative projects would adhere to all applicable federal, state, and local laws and regulations to reduce the impacts from accidental release of hazardous materials. Therefore, the Project facility would not contribute to a cumulative impact from the release of hazardous materials.

There are no schools located within 0.25 miles of the Project, therefore, no cumulative impacts to schools would occur.

Utility Switchyard

Construction and operation of the utility switchyard is considered in the cumulative impact analysis of the overall Project discussed above; therefore, similar to the overall Project, cumulative impacts related to hazardous materials handling would be less than significant.

5.9.5 Laws, Ordinances, Regulations, and Standards

The storage and use of hazardous materials and regulated substances at the Project facility are subject to laws, ordinances, regulations, and standards (LORS) established and enforced by federal, state, and local agencies. Applicable laws are summarized in Table 5.9-5.

Table 5.9-5 LORS Applicable to Hazardous Materials Handling

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
Federal	Section 302, EPCRA (Public Law 99-499 42 USC 110222) Hazardous Chemical Reporting: Community Right-to-Know (40 CFR 370)	Requires one-time notification if EHS are stored in excess of TPQs.	Impact HAZ-1	An HMBP would be prepared for the Project and submitted to Fresno County Environmental Health – CUPA/Hazardous Materials Compliance Program and uploaded to CERS.
Federal	Section 304, EPCRA (Public Law 99-499, 42 USC 11002) Emergency Planning and Notification (40 CFR 355)	Requires notification when there is a release of hazardous material in excess of its RQ.	Impact HAZ-1	Any releases of hazardous materials at the Project facility in excess of its RQ would follow the notification procedures described in the Project HMBP.
Federal	Hazardous Waste Storage Requirements (40 CFR Part 262)	Includes provisions for securing hazardous waste storage areas to prevent unauthorized access and potential release of hazardous materials.	Impact HAZ-1	The Project HMBP would include information regarding the secure storage of hazardous waste and materials.
Federal	Section 311, EPCRA (Public Law 99-499, 42 USC 11021) Hazardous Chemical Reporting: Community Right-to-Know (40 CFR 370)	Requires that SDSs for all hazardous materials or a list of all hazardous materials be submitted to the State Emergency Response Commission LEPC, and Fresno County Environmental Health – CUPA/Hazardous Materials Division	Impact HAZ-1	The Project HMBP would include a list of hazardous materials for submission to the State Emergency Response Commission LEPC and Fresno County Environmental Health CUPA/Hazardous Materials Division.

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
Federal	Section 313, EPCRA (Public Law 99-499, 42 USC 11023) Toxic Chemical Release Reporting: Community Right-to-Know (40 CFR 372)	Requires annual reporting of releases of hazardous materials.	Impact HAZ-1	Any releases of hazardous materials at the Project facility would follow the notification procedures described in the Project HMBP.
Federal	Section 112, CAA Amendments (Public Law 101-549, 42 USC 7412) Chemical Accident Prevention Provisions	Requires facilities that store a regulated hazardous material at a quantity greater than the TQ to develop an RMP.	Impact HAZ-1	An RMP for Sulfuric Acid and Hydrogen gas would be prepared for the Project facility.
Federal	Section 311, CWA (Public Law 92-500, 33 USC 1251 et seq.) Oil Pollution Prevention (40 CFR 112)	Requires preparation of an SPCC plan if the total oil and petroleum storage (including ASTs, oil-filled equipment, and drums) is greater than 1,320 gallons or if the oil or oil products stored in USTs exceeds 42,000 gallons.	Impact HAZ-1	An SPCC plan would be prepared for the Project facility if cumulative storage of oil and oil products on-site is greater than 1,320 gallons and/or storage of oil and oil products in USTs is greater than 42,000 gallons.
Federal	Chemical Facility Anti-Terrorism Standards 6 CFR Part 27	The Chemical Facility Anti-Terrorism Standards regulation of the DHS requires facilities that store hazardous materials above certain thresholds to submit information to the DHS to determine vulnerability and implementation of security measures.	Impact HAZ-1	The Project facility would complete and submit a top-screen survey to DHS within 60 days of storing hydrogen gas at the facility. DHS would determine the risk level and the Project facility would develop and implement a site security plan or alternative security plan for the facility.
Federal	U.S. Department of Transportation Regulations, 49 CFR 171-177	Governs the transportation of hazardous materials, including the making of transportation vehicles.	Impact HAZ-1	The Project HMBP would describe transportation requirements for hazardous materials stored at the Project facility. Based on the requirements outlined in 172.800, a security plan would not be required for the facility.
Federal	Hazardous Waste Operations and Emergency Response (49 CFR Section 1910.12)	Specifies the operational and response requirements related to the use, generations, and storage of hazardous materials.	Impact HAZ-1	The Project HMBP would describe operational and response requirements related to the use, generation, and secure storage of hazardous materials.
State	California Code of Regulations, Title 8, Section 339; Section 3200 et seq., Section 5139 et seq. and Section 5160 et seq.	Lists hazardous chemicals under the Hazardous Substance Information and Training Act; addresses control of	Impact HAZ-1	The Project HMBP would describe hazardous material handling requirements related to the control of hazardous

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
		hazardous substances; and addresses hot, flammable, poisonous, corrosive, and irritant substances.		substances, including hot, flammable, poisonous, corrosive, and irritant substances.
State	Health and Safety Code, Section 25500 et seq. (HMBP)	Requires preparation of an HMBP if hazardous materials are handled or stored in excess of threshold quantities.	Impact HAZ-1	An HMBP would be prepared for the Project and submitted to Fresno County Environmental Health – CUPA/Hazardous Materials Compliance Program and uploaded to CERS.
State	Health and Safety Code, Section 25531 through 25543.4 (CalARP)	Requires registration with local CUPA or lead agency and preparation of RMP if regulated (extremely hazardous) substances are handled or stored in excess of TPQs.	Impact HAZ-1	The Project RMP would be prepared for any regulated substances used at the Project facility and submitted to the Fresno County Environmental Health – CUPA/Hazardous Materials Compliance Program if regulated substances are used at the Project facility.
State	Occupational Safety and Health Act (19 CFR 1910.119)	For chemicals listed above thresholds, requires a process safety management plan for preventing or minimizing the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals. These releases may result in toxic, fire, or explosive hazards.	Impact HAZ-1	A process safety management plan would be prepared for chemicals stored at the Project facility in quantities exceeding the threshold quantities listed in Appendix A of 19 CFR 1910.119.
State	Health and Safety Code, Section 25270.13 (Aboveground Petroleum Storage Act)	Requires preparation of an SPCC plan if oil is stored in a single AST with capacity greater than 660 gallons or if the total petroleum storage (including ASTs, oil-filled equipment, and drums) is greater than 1,320 gallons.	Impact HAZ-1	An SPCC plan would be prepared for the Project and implemented if cumulative storage of oil and oil products on-site is greater than 1,320 gallons.
State	Health and Safety Code, Section 25249.5 through 25249.13 (Safe Drinking Water and Toxics Enforcement Act) (Proposition 65)	Requires warning to persons exposed to a list of carcinogenic and reproductive toxins and protection of drinking water from the same toxins.	Impact HAZ-1	The Project facility would be appropriately labeled for any chemicals stored on-site that are on the Proposition 65 list.

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
State	Health and Safety Code, Section 25100 through 25259	Establishes the procedures for hazardous waste storage, treatment, and transportation.	Impact HAZ-1	The Project HMBP would include details about the storage and transportation of hazardous materials and waste.
State	CVC Section 32100.5	Establishes the procedures for the state to determine transportation corridors for materials that may pose an inhalation hazard.	Impact HAZ-1	Transportation of hydrogen gas and sulfuric acid would follow designated routes.
State	CVC Section 32000 - 32053	Regulates the transportation of hazardous materials, including licensing and notification of hauling routes.	Impact HAZ-1	Transportation of hazardous materials to and from the Project facility would follow all licensing and notification requirements.
State	Health and Safety Code, Section 25280 through 25299 (Underground Storage of Hazardous Substances)	Regulates the construction, maintenance, testing, and use of USTs for the storage of hazardous substances	Impact HAZ-1	The Project facility is not expected to have any USTs therefore a UST monitoring plan is not required for the facility.
State	California Code of Regulations, Title 24 (California Fire Code)	Requires the preparation of a Hazardous Materials Management Plan (HMMP) and Hazardous Materials Inventory Statement (HMIS) or an HMBP that includes the required information.	Impact HAZ-1	The Project facility would prepare an HMBP that would include details that satisfy the requirements of the HMMP and HMIS.
State	California Code of Regulations, Title 22 (Hazardous Waste Management)	Establishes standards applicable to generators and transporters of hazardous waste.	Impact HAZ-1	The Project HMBP would include details regarding hazardous waste generation and transportation.
Local	Fresno County Municipal Code Section 8.60	Regulates the construction, maintenance, testing, and use of USTs for the storage of hazardous substances	Impact HAZ-1	The Project facility is not expected to have any USTs therefore a UST monitoring plan is not required for the facility.
Local	Fresno County Municipal Code Section 14.24.180	Notification requirements for known or suspected release of hazardous materials which may result in discharges into stormwater.	Impact HAZ-1	The Project HMBP would include procedures for notification if there is a known or suspected release of a hazardous substance.

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
Local	Fresno County General Plan Policy HS-F.1	Requires facilities that handle hazardous materials or wastes to be designed, constructed, and operated in accordance with all applicable laws and regulations.	Impact HAZ-1	The Project would comply with all local, state, and federal regulations for hazardous materials handling, storage, and transportation.

Notes:

CAA: Clean Air Act
CalARP: California Accidental Release Program
CERS: California Environmental Reporting System
CFR: Code of Federal Regulations
CUPA: Certified Unified Program Agency
CVC: California Vehicle Code
CWA: Clean Water Act
DHS: U.S. Department of Homeland Security
EHS: Environmental Hazardous Substances
EPCRA: Emergency Planning and Community Right-to-Know Act of 1986
HMBP: Hazardous Materials Business Plan
LEPC: Local Emergency Planning Committee
RMP: Risk Management Plan
RQ: Reportable Quantities
SDS: Safety Data Sheet
SPCC: Spill Prevention, Control, and Countermeasure
TPQ: Threshold Planning Quantities
TQ: Threshold Quantity
USC: United States Code
UST: Underground Storage Tank

5.9.5.1 Federal LORS

Hazardous materials are governed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Clean Air Act (CAA), and the Clean Water Act (CWA).

29 CFR 1910 et seq. and 1926 et. seq.

These sections contain requirements for equipment used to store and handle hazardous materials for the purpose of protecting worker health and safety. This regulation also addresses requirements for equipment necessary to protect workers in emergencies. It is designed primarily to protect worker health, but also contains requirements that affect general facility safety. The California regulations contained in Title 8 (California equivalent to 29 CFR) are generally more stringent than those contained in Title 29. The administering agency for the above authority is Federal Occupational Safety and Health Administration (OSHA) and the California Division of Occupational Safety and Health Administration (Cal-OSHA).

49 CFR Parts 172, 173, and 179

These regulations provide standards for labels, placards, and markings on hazardous materials shipments by truck (Part 172), standards for packaging hazardous materials (Part 173), and for transporting hazardous materials in tank cars (Part 179). The administering agencies for the above authority are the California Highway Patrol and United States Department of Transportation.

40 CFR Part 262

This regulation provides standards for securing hazardous waste storage areas to prevent unauthorized access and potential release of hazardous materials. The administering agencies for the above regulations are the Environmental Protection Agency (EPA) Region 9, the California

Department of Toxic Substances Control (DTSC), and the California Environmental Protection Agency (CalEPA).

Comprehensive Environmental Response, Compensation, and Liability Act

The Superfund Amendments and Reauthorization Act (SARA) amends CERCLA and governs hazardous substances. The applicable part of SARA for the Project is Title III, otherwise known as the Emergency Planning and Community Right-to-Know Act (EPCRA), which requires states to establish a process for developing local chemical emergency preparedness programs and to receive and disseminate information on hazardous substances present at facilities in local communities. The law provides primarily for planning, reporting, and notification concerning hazardous substances. Key sections of the law are as follows:

- Section 302 – Requires one-time notification when Environmental Hazardous Substances (EHS) are present in excess of their TPQ. EHSs and their TPQs are found in Appendices A and B to 40 CFR Part 355;
- Section 304 – Requires immediate notification to the Local Emergency Planning Committees (LEPC) and the State Emergency Response Commission when a hazardous material is released in quantities over its RQ;
- Section 311 – Requires that either Safe Data Sheets (SDS) for all hazardous materials or a list of all hazardous materials be submitted to the State Emergency Response Commission, LEPC, and local fire department; and
- Section 313 – Requires annual reporting of hazardous materials released into the environment either routinely or as a result of an accident.

The administering agencies for the above authority are Environmental Protection Agency (EPA) Region 9 National Response Center and the Fresno County Environmental Health Hazardous Materials Compliance Program. The Fresno County Environmental Health Hazardous Materials Compliance Program is the Certified Unified Program Agency (CUPA).

Clean Air Act

Regulations (40 CFR 68) under the CAA are designed to prevent accidental releases of hazardous materials. The regulations require facilities storing a TQ or greater of listed regulated substances to develop a Risk Management Plan (RMP), including hazards assessments and response programs to prevent accidental releases of listed chemicals. Section 112(r)(5) of the CAA discusses the regulated substances. These substances are listed in 40 CFR 68.130.

Clean Water Act

The Spill Prevention, Control, and Countermeasure (SPCC) rule under the CWA is designed to prevent or contain the discharge or threat of discharge of oil into navigable waters or adjoining shorelines. Regulations (40 CFR 112) under the CWA require facilities to prepare a written SPCC plan if they store oil, and its release would pose a threat to navigable waters. The SPCC rule is applicable if a facility has a single oil aboveground storage tank (AST) with a capacity greater than 660 gallons, total petroleum storage (including ASTs, oil-filled equipment, and drums) greater than 1,320 gallons, or underground storage capacity greater than 42,000 gallons. The SPCC rule is administered by the local CUPA, which is the Fresno County Environmental Health Hazardous Materials Compliance Program.

Other related federal laws that address hazardous materials but do not specifically address their handling include the Resource Conservation and Recovery Act (RCRA), which is discussed in Section 5.11, *Waste Management*, and the Occupational Safety and Health Act, which is discussed in Section 5.10, *Worker Safety*.

5.9.5.2 State LORS

California laws and regulations relevant to hazardous materials handling at the Project include Health and Safety Code Section 25500 (hazardous materials), Health and Safety Code 25531 (regulated substances), and the Aboveground Petroleum Storage Act (petroleum in ASTs).

Title 8, CCR, Section 339; Section 3200 et seq., Section 5139 et seq. and Section 5160 et seq.

Section 339 of Title 8 of the CCR lists hazardous chemicals relating to the Hazardous Substance Information and Training Act; 8 CCR Section 3200 et seq. and 5139 et seq. address control of hazardous substances; and 8 CCR Section 5160 et seq. addresses hot, flammable, poisonous, corrosive, and irritant substances.

Health and Safety Code Section 25500

California Health and Safety Code, Section 25500, et seq., and the related regulations in 19 CCR 2620, et seq., require local governments to regulate local business storage of hazardous materials in excess of certain quantities. The law also requires that entities storing hazardous materials be prepared to respond to releases. Those using and storing hazardous materials are required to submit an HMBP to their local CUPA and to report releases to their CUPA and the State Office of Emergency Services. The TQs for hazardous materials are 55 gallons for liquids, 500 pounds for solids, and 200 cubic feet for compressed gases measured at standard temperature and pressure.

Health and Safety Code Section 25531 (California Accidental Release Program)

California Health and Safety Code, Section 25531, et seq., and CalARP regulates the registration and handling of regulated substances. Regulated substances are any chemicals designated as an EHS by the EPA as part of its implementation of SARA Title III. Health and Safety Code Section 25531 overlaps or duplicates some of the requirements of SARA and the CAA. Facilities handling or storing regulated substances at or above TPQs must register with the local CUPA and prepare an RMP. The CalARP is found in Title 19, CCR, Chapter 4.5.

Aboveground Petroleum Storage Act

The California Health and Safety Code Sections 25270 and 25270.13 ensure compliance with the CWA. The law applies to facilities that operate a petroleum AST with a capacity greater than 660 gallons or combined AST capacity greater than 1,320 gallons, or oil-filled equipment where there is a reasonable possibility that the tank(s) or equipment may discharge oil in “harmful quantities” into navigable waters or adjoining shore lands. If a facility falls under these criteria, it must prepare an SPCC plan.

Proposition 65

The California law requires the state to identify chemicals that cause cancer and reproductive toxicity, contains requirements for informing the public of the presence of these chemicals, and prohibits discharge of the chemicals into sources of drinking water. Lists of the chemicals of concern are published and updated periodically by California's Office of Environmental Health Hazard Assessment. The Project facility would be appropriately labeled for any chemicals stored on-site that are on the Proposition 65 list.

Health and Safety Code, Section 25100 through 25259

This California law establishes the procedures for hazardous waste storage, treatment, and transportation. The California Department of Toxic Substance Control (DTSC) is the agency overseeing the management of hazardous waste. The Project facility HMBP would include information about the storage, treatment, and transportation of hazardous waste generated. Section 5.11, *Waste Management*, includes specific discussions about Hazardous Waste Management for the Project facility.

California Vehicle Code Section 32000 – 32053

CVC Section 3200 through 32053 regulates the transportation of hazardous materials, including licensing and notification of hauling routes. Haulers of hazardous materials would maintain appropriate licensing and transportation of hazardous materials to and from the Project would follow the appropriate hauling routes. Hauling routes and licensing requirements would be described in the HMBP prepared for the Project.

Health and Safety Code Section 25280

California Health and Safety Code, Section 25280, et seq. regulates the construction, maintenance, testing, and use of Underground Storage Tanks (USTs) for the storage of hazardous substances. The Project facility is not expected to have any USTs, therefore it is not subject to this regulation.

California Code of Regulations, Title 24 (California Fire Code)

This California law establishes the requirement for facilities to prepare a Hazardous Materials Management Plan (HMMP) and Hazardous Materials Inventory Statement (HMIS). However, if a facility has an HMBP, that document is considered to fulfill this requirement. The Project HMBP would include the required information regarding facility chemical and emergency response information.

California Code of Regulations, Title 22 (Hazardous Waste Management)

This California law establishes standards applicable to generators and transporters of hazardous waste. The DTSC is the agency overseeing the management of hazardous waste. Hazardous waste generated at the Project facility would be stored, transported, and managed in accordance with this law. Section 5.11, *Waste Management*, includes specific discussions about Hazardous Waste Management for the Project facility.

5.9.5.3 Local LORS

Fresno County Ordinance Code

The Project would adhere to all applicable policies within the Fresno County Ordinance Code Section 8.60 and Section 14.24.180. Fresno County Ordinance Code Section 8.60 regulates the construction, maintenance, testing, and use of USTs for the storage of hazardous substances in compliance with the California Health and Safety Code Section 25280. The Project facility is not expected to have any USTs, therefore it is not subject to Fresno County Ordinance Code Section 8.60.

Fresno County Ordinance Code Section 14.24.180 outlines notification requirements for known or suspected release of hazardous materials which may result in discharges into stormwater. The HMBP prepared for the Project would include local agency notification requirements for a known or suspected releases of hazardous materials.

Fresno County General Plan

The Project would adhere to all applicable policies within the Fresno County General Plan, Section HS-F, Hazardous Materials. Fresno County General Plan Policy HS-F.1 requires facilities that handle hazardous materials or waste to be designed, constructed, and operated in accordance with all applicable federal, state, and local laws and regulations.

Fresno County Environmental Health Department

The designated CUPA for the Project is the Fresno County Environmental Health Department. The Hazardous Materials Compliance Program oversees the state-mandated programs in Fresno County, the following of which are applicable for the Project:

- **Hazardous Materials Business Plan**: To satisfy the California Health and Safety Code, Section 25500, et seq., and the related regulations of 19 CCR 2620 et seq., an HMBP would be developed and submitted to the Fresno County Environmental Health Department;
- **California Accidental Release Program:** Under the CalARP regulations, facilities that store extremely hazardous substances or regulated substances above the threshold quantities must register with the CalARP Program and submit an RMP; and
- **AST Program (APSA):** To adhere to 40 CFR 112, this program requires preparation of an SPCC plan if oil is stored in a single AST with capacity greater than 660 gallons or if the total petroleum storage (including ASTs, oil-filled equipment, and drums) is greater than 1,320 gallons or oil-filled equipment where there is a reasonable possibility that the tank(s) or equipment may discharge oil in “harmful quantities” into navigable waters or adjoining shore lands.

5.9.6 Agencies and Agency Contact

Several agencies regulate hazardous materials and would be involved in regulating hazardous materials used and stored at the Project. EPA would be the primary regulatory agency at the federal level and the California EPA would be the primary regulatory agency at the state level. However, local regulatory agencies are primarily responsible for enforcing hazardous material handling laws. For the Project, the local regulatory agency with jurisdiction would be the Fresno County Environmental Health Hazardous Materials Compliance Program and the Fresno County Fire Protection District. Local regulatory agency contacts are shown in Table 5.9-6.

Table 5.9-6 Agency Contacts for Hazardous Materials Handling

Issue	Agency	Contact
CUPA for HMBP and RMP	Fresno County Environmental Health – Hazardous Materials Compliance Program	(559) 600-3271
Fire Department Permits	Fresno County Fire Protection District	(559) 493-4300
Hazardous Materials Response	Fresno County Department of Community Health	(559) 600-5956

Source: Fresno County Environmental Hazardous Materials Compliance Program (https://www.fresnocountyca.gov/Departments/Public-Health/Environmental-Health/HazMat-Compliance-The-Designated-CUPA)

Fresno County Fire Protection District (https://www.fresnocountyfire.org/)

5.9.7 Permits and Permit Schedule

The Fresno County Environmental Health Hazardous Materials Compliance Program requires the Project to obtain the permits listed in Table 5.9-7 before storing hazardous materials on-site.

Table 5.9-7 Permits and Permit Schedule for Hazardous Materials Handling

Permit	Schedule	Status
HMBP	Submittal at least 30 days prior to operation, and submitted through California Environmental Reporting System (CERS). Permit fees are paid to Fresno County Environmental Health Hazardous Materials Compliance Program.	Pending
CalARP Program Registration and RMP	Submittal at least 30 days prior to operation, and submitted through CERS. Permit fees are paid to Fresno County Environmental Health Hazardous Materials Compliance Program.	Pending
SPCC	Submittal at least 30 days prior to operation to Fresno County Environmental Health Hazardous Materials Compliance Program.	Pending
Top Screen Survey	Notify DHS within 60 days of Hydrogen gas being stored at the Project Facility.	Pending
Site Security Plan or Alternative Security Program	Based on DHS tier assignment after notification. Would be submitted for the Project following DHS tier assignment.	Pending

Source: Fresno County Environmental Hazardous Materials Compliance Program (https://www.fresnocountyca.gov/Departments/Public-Health/Environmental-Health/HazMat-Compliance-The-Designated-CUPA)

5.9.8 References

Fresno County. 2023a. Fresno County Environmental Health Division – Hazardous Material Compliance Program. CUPA website. Available online at: https://www.fresnocountyca.gov/Departments/Public-Health/Environmental-Health/HazMat-Compliance-The-Designated-CUPA. Accessed August 2023.

Fresno County. 2023b. Fresno County Municipal Code. Available online at: https://library.municode.com/ca/fresno_county/codes/code_of_ordinances. Accessed August 2023.

Fresno County. 2000. *Fresno County General Plan*. October 2000.

National Oceanic and Atmospheric Administration (NOAA). 2023. Cameo Chemicals Database of Hazardous Materials. Available online at: https://cameochemicals.noaa.gov/chemical/19288. Accessed August 2023.

Occupational Safety and Health Administration (OSHA). 2023. OSHA Occupational Chemical Database. Available online at: https://www.osha.gov/chemicaldatabase. Accessed August 2023.

Stantec Consulting Services, Inc. (Stantec). 2022. *Phase I Environmental Site Assessment.* Draft September 2022.

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